Region 4's Science and Ecosystem Support Division (SESD) is actively working on two issues related to per- and polyfluoroalkyl substances (PFAS). PFAS are a broad class of environmental contaminants of emerging concern with two of the most well-known compounds being PFOA (perfluoro-*n*-octanoic acid) and PFOS (perfluoro-*n*-octanesulfonate). PFAS analysis can be very challenging, especially given their diversity and lack of well-established EPA approved analytical methods.

In an effort to address increasing demand for analytical support for PFAS, a cross-Agency workgroup was established and includes a chemistry subgroup. The subgroup includes Regional laboratories (including SESD) and the Office of Research and Development (ORD). The focus within the chemistry subgroup is to develop multi-laboratory validated methods to quantify 24 separate PFAS in water samples other than drinking water (surface, ground and waste water). This work is expected to be complete by the end of calendar year 2017.

SESD is also actively involved in the Agency's collaborative effort with North Carolina to address PFAS contamination in the Cape Fear Watershed. The contaminant hexafluoropropylene oxide dimer acid (HFPO-DA), which is commonly known as GenX was identified in the watershed as part of an ORD research effort. GenX is another PFAS which emerged as a PFOA replacement. Once the contaminant was detected, NC requested assistance from EPA including support in analyzing additional water samples. At that time the only EPA laboratory with the capability to analyze for GenX was the original research laboratory, ORD's National Exposure Research Laboratory (NERL). To ensure continued capacity to support NC and other states, SESD is developing the capability to analyze for GenX. We are currently single-lab validating a procedure similar to the one utilized by ORD NERL to identify GenX in water. It is expected that the method validation will be completed and the lab will be ready to analyze environmental samples in September or October of 2017.

Along with the GenX compound, ORD NERL tentatively identified several other fluorinated oxide acids in the Watershed. If requested to analyze for these or other similar compounds SESD would be able to tentatively identify these compounds by retention time matching based on ORD NERL's tentative identification of the compounds. Due to a lack of commercially available standards any laboratory, including SESD, would only able to report estimated concentrations of these fluorinated oxide acids.